

CLASSÉ AUDIO

**CP-45**

REMOTE CONTROL  
BALANCED PREAMPLIFIER

**CP-45**

OWNER'S MANUAL

## ***CLASSÉ DESIGN PHILOSOPHY***

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### **1. REPEATED LISTENING DESIGN SESSIONS:**

Fine tuning of sound by exchanging and mixing of parts (transistors, capacitors, wiring, PCB boards etc.), and adjusting many specific operating voltages within proper engineering ranges, producing an overall sonic recipe giving the most natural harmonic realism of music typical of instruments in a live performance.

### **2. UPGRADABLE SINGLE CIRCUIT DESIGNS:**

All Classé products (all preamps and all amps) share exactly the same circuit design philosophy (excluding moving coil and moving magnet phono circuits). This means all amplifiers and all high level circuits of the preamps benefit from the same design goals. Similar circuits are then tailored to different power levels etc. Differences between less expensive models and more expensive models are parts quality and compliment, power supply extravagance and the amount of filtering etc., as well as features and packaging.

This means that for years Classé has been constantly sonically fine tuning and technically upgrading this circuit design and its application, thus reaching a very high level of natural musical enjoyment, as well as excellent reliability which benefits all models - least expensive, most expensive, preamps and amplifiers alike.

### **3. EXTREME LONG LIFE IN REAL WORLD CONDITIONS:**

Choosing the best attainable quality parts and materials combined with the advantages of the two above-mentioned areas provides Classé owners with years of proven trouble free reliability and musical enjoyment.

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## **UNPACKING & SET-UP**

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Your CLASSÉ **CP-45** preamplifier has been carefully wrapped in heavy gauge plastic, packed in semi-rigid foam and contained in a special box. To remove the unit, open and spread the top flaps of the box. By its sides, lift out the entire unit with foam pieces intact. Remove each foam side by pulling straight out. Remove the plastic wrap and inspect the unit for any concealed damage. Apart from this owner's manual, please ensure the following has also been included:

- 1) DETACHABLE LINECORD.
- 2) ALLEN KEY FOR TOP COVER.
- 3) REMOTE CONTROL UNIT (Allen key and Batteries: AAA X 2 included).
- 4) RESISTOR KIT FOR MOVING COIL GAIN ADJUSTMENT. (with optional phono only)

Please report any damage or missing parts to your dealer promptly.

This preamplifier, being capable of very high gain, must be located in a position free of any hum-inducing magnetic fields. (This also applies to turntables and interconnect cables.) Positions adjacent to power amplifiers, A.C line filters, or regulation devices should be avoided. Ideally, a few feet should separate the preamplifier from the power amplifier. As well, keep low-level interconnect cables away from the power amp and separate from A.C. line cords.

Heat generated by the preamplifier is negligible. Air space around the unit need not be a concern.

Check the Serial Number sticker on the back of the unit for the correct operating voltage. Regardless of voltage, the internal fuse rating should be 1 AMP SLO-BLO.

## **A.C. LINE POWER**

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The Classé **CP-45** preamplifier has no power switch. Its low power consumption and improved sonics from always being ON led to the omission of an ON/OFF switch. In fact, while thoroughly musical shortly after turn-on, the preamplifier will exhibit "sonic growth" during its first 300 hours of use.

For optimum sonic performance, you should consider the use of the optional CLASSÉ REFERENCE A.C. LINECORD. Consult your dealer regarding this accessory.

### **SAFETY FEATURE:**

The **CP-45** preamplifier is designed with an auto-muting circuit which engages and is indicated by a FLASHING GREEN LED when the unit is first connected, or after an AC power failure. After 15 seconds the STEADY GREEN LED signals that the unit is in STANDBY mode (Note: MUTE is ON during STANDBY mode).

This feature will prevent any turn-on surges or unstable output from reaching the power amplifier and possibly the loudspeakers. Similarly, make sure the MUTE is ON (STEADY GREEN) again when removing A.C. line power.

### **CAUTION:**

DISCONNECT AC LINE CABLE WHILE MAKING ALL CONNECTIONS. "FLOATING THE GROUND" OR DEFEATING THE GROUND ON A 3-PRONG LINECORD MAY CREATE A SHOCK HAZARD. CONNECT ALL INTERCONNECT CABLES BETWEEN THE ELECTRONICS BEFORE CONNECTING THE A.C. LINECORDS TO THE WALL OUTLETS. THIS WILL REDUCE THE POTENTIAL SHOCK HAZARD. SEE ALSO THE WARRANTY SECTION OF THIS OWNER'S MANUAL.

## ***INPUTS:***

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The input jacks are clearly marked on the back of the **CP-45**. The following inputs are provided: PHONO/AUX, VIDEO, CD, TUNER, BALANCED, and TAPE.

### **PHONO/AUX**

The **CP-45** preamplifier can be configured as a PHONO unit by installing the optional internal phono board onto the main board. The PHONO and AUX inputs share the same pair of RCA input jacks. The GND screw is located next to PHONO/AUX input jacks. The following steps should be performed to remove or install the phono board.

- 1) Make sure MUTE is ON (Steady GREEN)
- 2) Disconnect A.C. linecord from the wall outlet.
- 3) Remove the top cover with the Allen key supplied.

PHONO CONFIGURATION: (installation of phono board)

- 4) Locate and replace mounting screws 1, 2, 3 with the stand-offs supplied.
- 5) Remove jumpers J1, J2 (see fig.1, Page 9)
- 6) Install and secure the phono board using screws in step 4, make sure all connectors are properly aligned. Set MC/MM jumpers if required (see fig-2a, 2b page 10). Replace the top cover.

AUX CONFIGURATION: (removal of phono board)

- 7) Reverse steps 4, 5, and 6, make sure jumpers J1 and J2 are reinstalled for AUX operation. (see fig.1a, page 9)

### PHONO INPUT:

When switched to PHONO the input can accommodate both magnetic and moving coil cartridges of various outputs. In the MC position, gain of the Moving Coil stage is factory preset at 16dB which matches perfectly with most typical MC cartridges. With the resistor kit included, the gain can be adjusted to 18dB, 23dB, or 28dB, in order to optimize system gain, and lower noise while using other less typical MC cartridges. (Note: The MC gain is in addition to the standard MM gain of 42dB). To change the MC gain, proceed as follows:

- 1) Perform steps 1, 2, and 3 as mentioned above.
- 2) Locate R104 and R204 (see fig.2, Page 10), which are the MC gain setting resistors for the LEFT and RIGHT channels respectively. Remove the resistors and replace them with newly selected ones, according to the following chart:

	GAIN	COLOR CODED RESISTOR	(or) NUMERICAL RESISTOR
Standard	13 dB	(Brown,White,Blue,Brown)	1961
	18 dB	(Orange,Grey,Orange,Brown)	3831
	23 dB	(Purple,Green,Black,Brown)	7501
	28 dB	(Brown,Red,Purple,Red)	1272

- 5) Having completed the resistor changes, replace the top cover.

### AUX INPUT:

When selected (see AUX configuration) the AUX input serves as an additional high level input, accommodating additional sources such as VIDEO, CD, TUNER, etc..

### VIDEO, CD, TUNER:

These are all high level inputs sharing exactly the same characteristics, and may be interchanged if so desired.

BALANCED The BALANCED INPUT is a true differential high level input, wired as follows:

PIN 1: GROUND

PIN 2: POSITIVE (NON-INVERTED) SIGNAL

PIN 3: NEGATIVE (INVERTED) SIGNAL

It may be used with CD players that have a balanced output, or any other high level balanced sources.

### TAPE IN

The TAPE IN of the **CP-45** preamplifier should be connected to the LINE OUT or TAPE OUT of the tape deck. The TAPE input does not appear on the selector switch. It is activated by the TAPE switch. (See FRONT PANEL CONTROLS: TAPE SWITCH.)

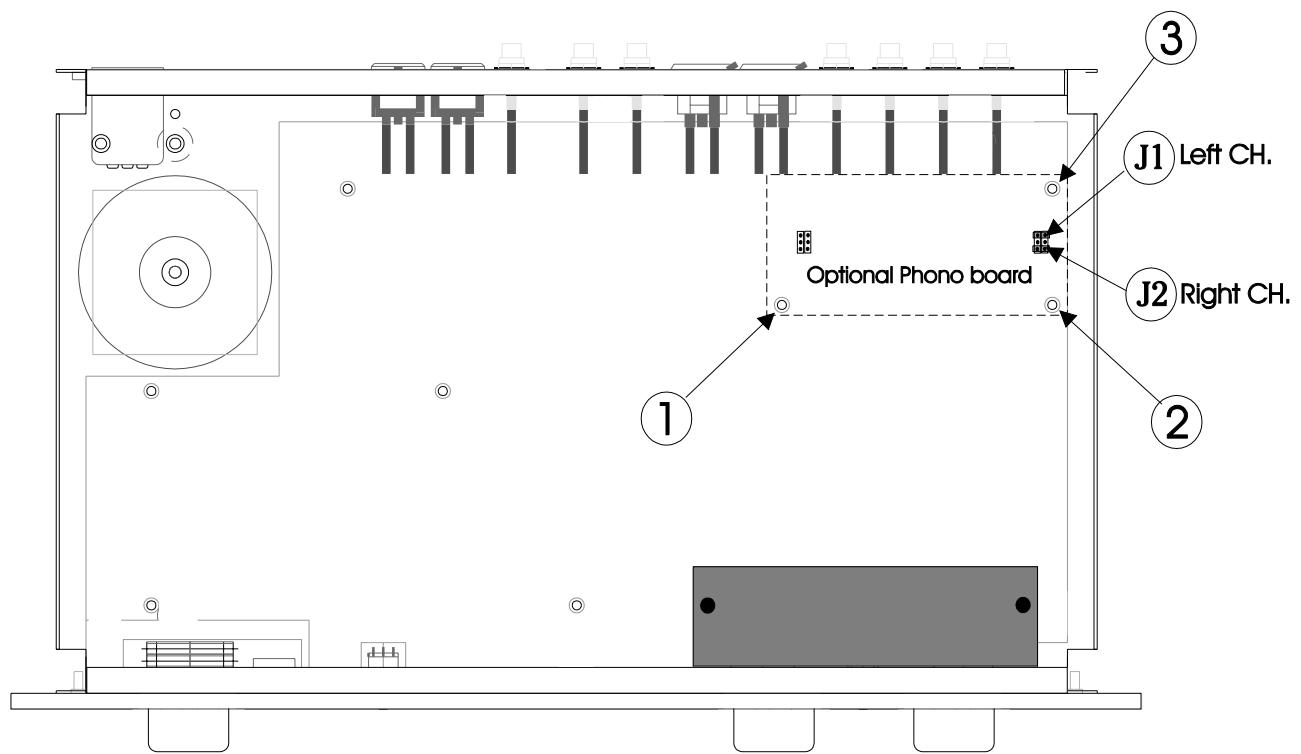
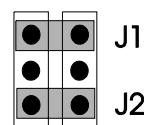


Fig.1 CP-45 Top view

Left ch.



Right ch.

Fig.1a Jumpers setting for AUX input

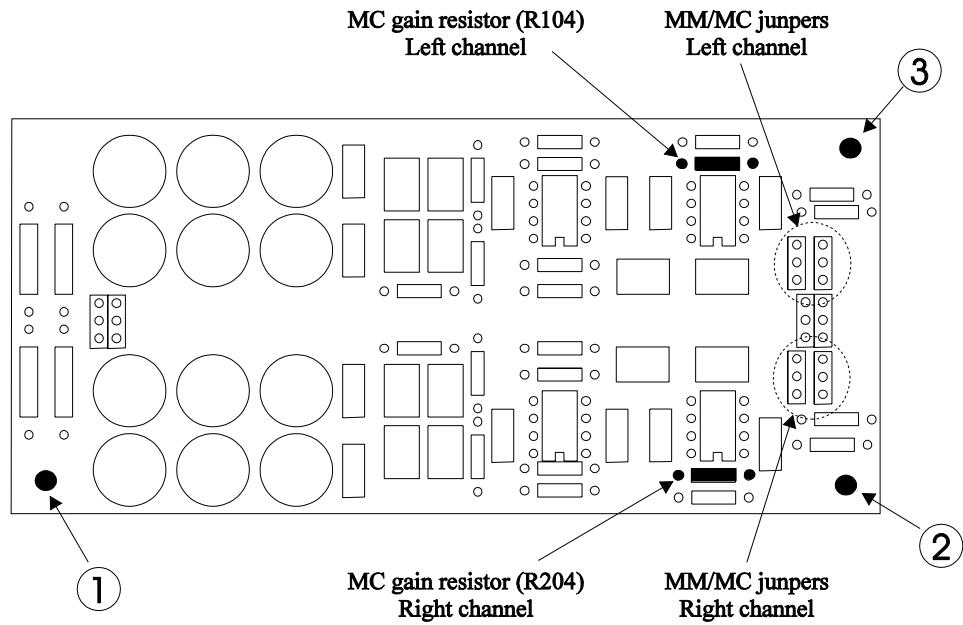


Fig.2 CP-45 Optional Phono Board

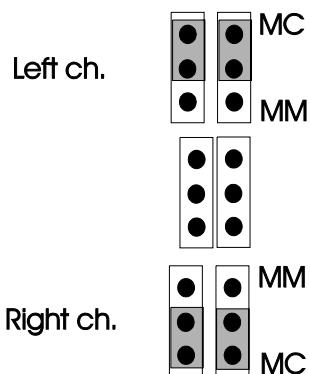


Fig.2a Jumpers setting for MC

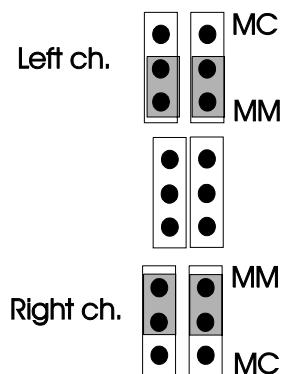


Fig.2a Jumpers setting for MM

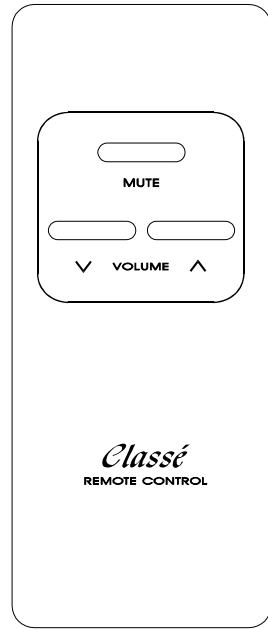


Fig.3: Remote control unit (top view)

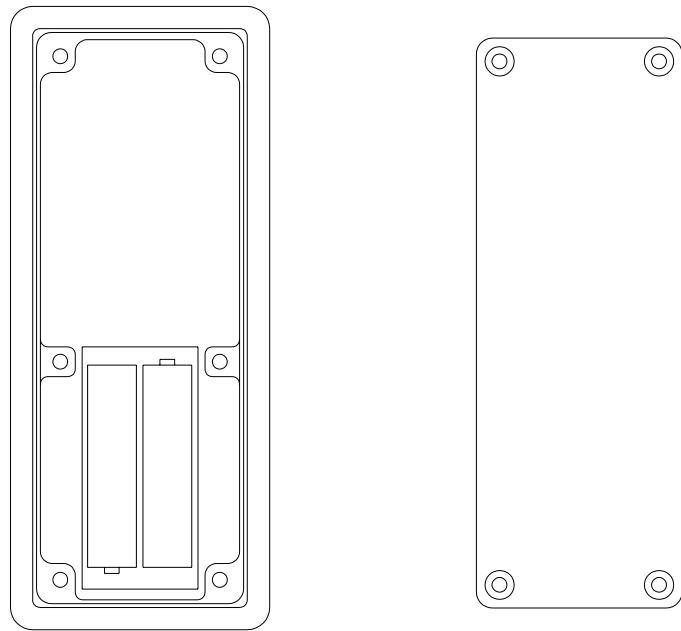


Fig.4: Remote control unit (bottom view)

## ***OUTPUTS***

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The Classé **CP-45** preamplifier has both regular (single-ended) and balanced outputs. Both are working at all times, and may be used separately, or simultaneously.

### **TAPE OUTPUT**

Whatever input is selected by the INPUT SELECTOR will be fed to the TAPE OUTPUT jacks. This should be connected to the TAPE IN or LINE IN of the tape deck.

### **REGULAR OUTPUTS**

Simply connect your regular interconnects to the RCA output jacks marks REGULAR OUTPUT on the back of the **CP-45**.

### **BALANCED OUTPUTS**

A balanced power amplifier and balanced interconnects are also required. For use with a balanced power amplifier other than Classé, the wiring of the 3-pin XLR connectors must be wired as follows:

PIN 1: GROUND

PIN 2: POSITIVE (NON-INVERTED) SIGNAL

PIN 3: NEGATIVE (INVERTED) SIGNAL

If the pin configuration of the power amplifier differs from above, the balanced interconnects must be modified to accommodate the different power amp.

Having confirmed the correct connections, plug the XLR connectors of the balanced interconnects into the locking XLR connector on the rear of the **CP-45** marked BALANCED OUTPUT. (To remove the connectors, press the tab above the connector.)

## ***FRONT PANEL CONTROLS***

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### **INPUT SELECTOR:**

This selects one of the five inputs connected to the preamplifier, except TAPE IN (see TAPE SWITCH below). The selector switch is silent and will prevent pulses when switching positions. However, it remains good practice to reduce the volume control level or put MUTE to ON (steady GREEN LED) when changing the input selection.

### **TAPE BUTTON:**

When TAPE is not selected, the preamp will process the signal as chosen by the INPUT SELECTOR. With TAPE input is selected, which indicated by a Red LED, the preamp will process the TAPE INPUT signal, overriding the INPUT SELECTOR.

### **BALANCE CONTROL:**

The custom balance control permits equal output of each channel in the center (detented) position without additional loading to the signal. When shifted to the left or right, it merely attenuates the opposite channel.

### **VOLUME CONTROL:** (remote control)

The VOLUME CONTROL varies the output level of both channels simultaneously. It can be operated from remote using the hand held control unit (see fig.3 Page 11) or manually turning the control knob at the preamp.

**MUTE BUTTON:** (remote control)

Switching between PLAY and MUTE can be done by either pushing the MUTE button on the **CP-45** faceplate or on the hand held remote control unit. The PLAY (or MUTE OFF) and MUTE ON selections are indicated by the STEADY RED or GREEN LED respectively at the preamp.

When MUTE (ON) is selected, which is indicated by a STEADY GREEN LED, the outputs of the preamplifier are completely cut off. In the PLAY (MUTE OFF) selection, which is indicated by a STEADY RED LED, the signal is allowed to pass to the power amplifier.

**NOTE: WHEN THE CP-45 IS IN THE MUTE POSITION, AND THE VOLUME CONTROL IS TURNED UP USING THE REMOTE CONTROL UNIT, THE PLAY MODE IS AUTOMATICALLY SELECTED.**

**CAUTION:** Make sure the preamp is in MUTE (ON) when making or changing any connections. This includes all inputs and outputs, as well as A.C. linecord.

***CLASSÉ CP-45 LIMITED FACTORY WARRANTY*** (North America only).

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**IMPORTANT:** Warranty registration and a copy of the “Authorized Dealer Bill of Sale” must be received at the Classé Audio factory (address below) within thirty (30) days of purchase by the original retail purchaser in order to validate this warranty.

**FIVE YEAR WARRANTY (all parties)**

Classé Audio, Inc. warrants this product to be free from defects in materials and workmanship to the original retail purchaser for a period of FIVE YEARS from date of manufacture, provided that any claim in virtue of this warranty be made in writing within such period. (Hand held remote control is warranted for one year only. No warranty is offered for batteries).

This warranty may not be transferred to any subsequent owner unless the following conditions have been met: the product will be re-sold through an authorized Classé Audio dealer, who will be responsible for contacting Classé with all specifics (name of new owner, address of new owner, serial number of the product) of the subsequent sale. If the subsequent owner has purchased the product through an authorized Classé Audio dealer, and all of the above conditions have been met, the new owner will have the benefit of any remaining coverage from the original five year period.

In order to initiate service of any kind, it is necessary to OBTAIN PRIOR FACTORY AUTHORIZATION, AND SHIP THE UNIT PREPAID TO THE CLASSÉ FACTORY. Units coming from the USA should be shipped directly to our CUSTOMS BROKER: STARBER FRITZ INTERNATIONAL, C/O CLASSÉ AUDIO, HIGHWAY 114 EAST, NORTON, VERMONT 05907 USA.

The warranty shall be void and of no effect in the event of any of the following:

- 1) Operation not in accordance with this manual.
- 2) Accident, abuse, tampering, or unauthorized modification, as determined by Classé Audio Inc.
- 3) Removal, defacing, or falsifying the serial number plate.
- 4) Shipping without the complete factory packaging.
- 5) Shipping without the complete factory packaging.

- 6) Transfer or sale of this preamplifier by the original owner.
- 7) Non-compliance with any of the other conditions hereof.

CLASSÉ AUDIO INC. SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES REGARDING THE SET-UP, OPERATION, FAILURE, TROUBLESHOOTING, OR REPAIR OF THE PREAMPLIFIER AND/OR ANY OTHER EQUIPMENT USED THEREWITH.

THIS WARRANTY, ALL CLAIMS MADE IN VIRTUE HEREOF, AND ALL ISSUES RELATING TO ANY SUCH CLAIM SHALL BE GOVERNED BY THE LAWS OF THE PROVINCE OF QUÉBEC.

# **CLASSE CP-45**

## **REMOTE CONTROL BALANCED PREAMPLIFIER FEATURES AND SPECIFICATIONS SHEET**

### **CP-45 FEATURES:**

Large power supply with six (6) stages of regulation. One (1) set of balanced inputs, four (4) sets of single ended inputs, one (1) set of balanced outputs, one (1) set of single ended outputs, one (1) Tape loop. Remote control featuring adjustments for volume and mute. Slimline chassis, with brushed and anodized top cover. Available in both Satin Black and Soft Shadow Silver finishes.

### **CP-45 SPECIFICATIONS:**

Frequency Response:	20 Hz to 20 KHz +/- 0.1dB	
Maximum Output:	28 Volts	
Sensitivity:	Line:	120 Millivolts
	Magnetic Phono:	3 Millivolts (opt. phono)
	Moving Coil Phono:	0.2 Millivolts (opt. phono)
S/N Ratio ('A' Weighted):	Line:	100 dB
	Magnetic Phono:	85 dB (opt. phono)
	Moving Coil Phono:	85 dB (opt. phono)
Input Impedance:	Line:	25 KOhms
	Magnetic Phono:	47 KOhms (opt. phono)
	Moving Coil Phono:	50 Ohms adjustable
Output Impedance:		50 Ohms
Gain:	Line:	18 dB
	Magnetic Phono:	42 dB (opt. phono)
	Moving Coil Phono:	55-70 Db (opt. phono)
THD+N:		Adjustable for 18, 23, 28dB
Power Requirement:		0.007%
		25 Watts
Dimensions:	Gross:	22" x 18" x 12"
	Net:	19" x 12 1/4" x 3"
Weight:	Gross:	24 lbs
	Net:	19 lbs

## **WARRANTY REGISTRATION**

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You must fill out and return the form below, along with a copy of the authorized dealer bill of sale, to the factory within thirty (30) days of purchase. This will allow us to provide expedient service, information regarding updates and new products, and validate the Classé warranty.



**CP-45** SERIAL NUMBER \_\_\_\_\_ PURCHASE DATE \_\_\_\_\_

AUTHORIZED DEALER \_\_\_\_\_

PURCHASER'S NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE/PROV. \_\_\_\_\_

COUNTRY \_\_\_\_\_ ZIP/POSTAL CODE \_\_\_\_\_

I BECAME AWARE OF THIS PRODUCT BY: \_\_\_\_\_

(DEALER, MAGAZINE, FRIEND, ETC.)



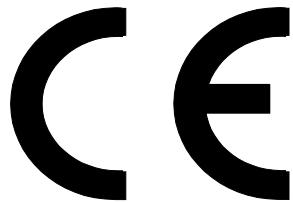
SEND TO: CLASSÉ AUDIO INC.

Product Registration

5070 François Cusson

Lachine, Quebec, Canada

H8T 1B3



### **Notice to all Classé Product owners:**

Thank you for your purchase of a Classé Audio component.

All of us at Classé have taken extreme care to ensure that your purchase will become a prized investment. We are proud to inform you that all Classé Audio components have been officially approved for the European Community CE mark.

This means that your Classé product has been subjected to the most rigorous manufacturing and safety tests in the world, and have proven to meet or exceed all European Community CE requirements for unit to unit consistency and consumer safety.

All of us at Classé Audio wish you many years of musical enjoyment.

**As of July 18, 1996, Classé Audio has been granted  
Certificate No: C401CLA1.MGS, which indicates CE  
approval for all models of the Classé Audio product line.**